

COLUMBIA RIVER CHANNEL IMPROVEMENTS - DREDGING

DREDGE OREGON		Contract Number: W9127N-06-C-CRCI					
Project Name/Location: Columbia River Channel Improvement, RM 101+10 to 100+40							
12/7/2005							
Dredge OREGON Tidal Stage Ebb Weather: Overcast Wind: Calm Seas: Calm Disposal location Gateway (upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DRP-1 (21)	19.8	7:35:23	7622830.3	734909.7	2.3	NA
	DRP-1R ₁ (21)	19.9	7:36:14	7622843.5	734885.7	2.6	NA
	DRP-2 (22)	19.7	7:43:01	0.0	0.0	2.3	11.9
	DRP-2R ₁ (22)	19.7	7:46:59	7622743.8	735372.5	2.8	11.9
	DRP-3 (23)	-0.3	7:48:35	7622613.7	735529.4	7.8	NA
	DRP-3R ₁ (23)	20.7	7:51:50	7622674.0	735529.1	2.3	NA
	DRP-3R ₂ (23)	20.0	7:52:22	7622696.2	735554.8	2.4	NA
	DRP-4 (24)	20.0	8:00:11	7622913.4	735299.5	3.6	NA
	Retest @ point of exceedance						
All coordinates are Oregon State Plane North 3601; Datum: NAD 83							
Remarks:				Action Taken:			
No exceedances. Sample DRP-1R ₁ collected because dredge coordinates were not marked. DRP-2R ₁ collected due to GPS error. DRP-3R ₁ collected because DRP-3 was taken before Sonde was at depth. DRP3-R ₂ collected at correct depth.				None required.			
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DRP-1	Background - 100' Up Current, Within 600-Foot of Channel					N/A	Not Required
DRP-2	100' Down Current of the Cutterhead					OR	OR, WA
DRP-3	300' Down Current of the Cutterhead					WA	Not Required
DRP-4	150' lateral of the cutterhead (Port or Starboard)					WA	Not Required
DRPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

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Project Name/Location:							
Columbia River Channel Improvement, RM 101+10 to 100+40							
12/7/2005							
Dredge Oregon Tidal Stage Ebb	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.2	8:06:21	7623863.1	735554.2	2.6	NA
	DSPP-2 (12)	20.0	8:10:41	7623808.4	735758.9	NA	11.8
	DSPP-3 (13)	20.1	8:16:01	7623525.7	736182.6	2.8	NA
Weather: Overcast Wind: Calm Seas: Calm Disposal location Gateway (Upland)	Retest @ point of exceedance						
Remarks:				Action Taken:			
No exceedances.				None required.			
Sample point numbers in parenthesis correspond with							
YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

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Project Name/Location:		Columbia River Channel Improvement, RM 101+10 to 100+40					
12/7/2005							
<u>Dredge</u> Oregon <u>Tidal Stage</u> Ebb	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.1	9:35:02	0	0	2.6	NA
	DSPP-1R ₁ (11)	20.0	9:36:20	7623873.3	735563.7	3.0	NA
	DSPP-2 (12)	20.1	9:40:00	7623812.9	735782.4	NA	11.9
<u>Weather:</u> Overcast <u>Wind:</u> 5 kts <u>Seas:</u> Calm <u>Disposal location</u> Gateway (Upland)	DSPP-3 (13)	20.2	9:45:16	7623523.3	736173.2	2.7	NA
	Retest @ point of exceedance						
All coordinates are Oregon State Plane North 3601; Datum: NAD 83							
Remarks:				Action Taken:			
No exceedances.				None required			
Retest at DSPP-1R ₁ due to GPS error.							
Sample point numbers in parenthesis correspond with							
YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

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Project Name/Location:		Columbia River Channel Improvement, RM 101+10 to 100+40					
12/7/2005							
<u>Dredge</u> Oregon <u>Tidal Stage</u> Ebb	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.1	11:35:08	7623872.9	735548.4	2.7	NA
	DSPP-2 (12)	0.5	11:38:20	7623808.2	735749.0	NA	11.9
	DSPP-2R ₁ (12)	20.2	11:40:05	7623788.7	735749.6	NA	11.9
<u>Weather:</u> Overcast <u>Wind:</u> 5 kts <u>Seas:</u> Calm <u>Disposal location</u> Gateway (Upland)	DSPP-3 (13)	20.0	11:44:39	7623508.0	736180.6	3.5	NA
	Retest @ point of exceedance						
		All coordinates are Oregon State Plane North 3601; Datum: NAD 83					
Remarks:		Action Taken:					
No exceedances.		None required.					
DSPP-2R ₁ (12) collected because sonde was not previously at correct depth.							
Sample point numbers in parenthesis correspond with YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

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DREDGE OREGON				Contract Number: W9127N-06-C-CRCI			
Project Name/Location:							
Columbia River Channel Improvement, RM 101+10 to 100+40							
12/7/2005							
<u>Dredge</u> Oregon <u>Tidal Stage</u> Ebb <u>Weather:</u> Overcast <u>Wind:</u> 5 kts <u>Seas:</u> Calm <u>Disposal location</u> Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.1	13:35:02	7623867.7	735573.4	2.5	NA
	DSPP-2 (12)	19.9	13:38:55	7623800.3	735750.7	NA	12.0
	DSPP-3 (13)	19.9	13:46:10	7623537.5	736183.7	3.4	NA
Retest @ point of exceedance							
All coordinates are Oregon State Plane North 3601; Datum: NAD 83							
Remarks:				Action Taken:			
No exceedances.				None required.			
Sample point numbers in parenthesis correspond with							
YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

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Project Name/Location:							
Columbia River Channel Improvement, RM 101+10 to 100+40							
12/7/2005							
Dredge Oregon Tidal Stage Ebb Weather: Overcast Wind: 5 kts Seas: Calm Disposal location Gateway (Upland)	Sample Point	Depth (ft)	Time	X-Coordinate	Y-Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSPP-1 (11)	20.2	15:35:04	7623867.5	735567.9	2.8	NA
	DSPP-2 (12)	20.2	15:38:18	7623793.2	735771.7	NA	12.1
	DSPP-3 (13)	20.1	15:42:56	7623529.8	736193.8	3.5	NA
	Retest @ point of exceedance						
	All coordinates are Oregon State Plane North 3601; Datum: NAD 83						
Remarks:				Action Taken:			
No exceedances.				None required.			
Sample point numbers in parenthesis correspond with							
YSI 650 MDS logged data.							
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSPP-1	100' up current (background) within 600' channel					N/A	N/A
DSPP-2	100' down current from the discharge					Not Required	WA
DSPP-3	600' down current, 150' lateral to the discharge					WA	Not Required
DSPPT	Indicates additional testing at the point of exceedence						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

Dredge Sugar Island Project Name/Location:				Contract Number: W9127N-05-C-0012			
Columbia River Channel Improvement - RM 95+00-104+20.							
Date: 12/07/2005							
Dredging Load Number 1527 Tidal Stage Ebb Dredge State: Overflow through skimmers only Weather: Clear Wind: 0-5 kts Seas: 0-1' Disposal location Columbia River RM 101	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.9	8:13:00	7623500.60	755881.45	3.2	
	DR-2	20.2	8:14:42	7623318.84	756537.06	17.0	13.6
	DR-2R1	20.4	8:14:45	7623319.01	756543.14	16.7	14.0
	DR-4	19.0	8:15:52	7623529.74	757072.23	15.3	
	DR-4R1	20.7	8:15:55	7623529.74	757072.23	13.4	
	DR-3	19.6	8:17:41	7623242.04	755773.20	20.3	
	DR-3R1	19.4	8:17:44	7623242.04	755773.20	16.8	
Remarks:				Action Taken:			
DR-2 exceeded 10% over background, taken in the plume.				Re-test DR-2R1 was taken.			
DR-4 exceeded 10% over background, taken in the plume.				Re-test DR-4R1 was taken.			
DR-3 exceeded 10% over background, taken out of plume				Re-test DR-3R1 was taken.			
on port side.				The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.			
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel					OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current						
DR-3	300' Radially from point of dredge (Port or Starboard)						
DR-4	900' Down Current from point of dredging						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

Dredge Sugar Island Project Name/Location: Contract Number: W9127N-05-C-0012							
Columbia River Channel Improvement - RM 95+00-104+20.							
Date: 12/07/2005							
Disposal <u>Load Number</u> 1527 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Split Hull <u>Weather:</u> Clear <u>Wind:</u> 0-5 kts <u>Seas:</u> 0-1' <u>Disposal location</u> Columbia River RM 101	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DSP-1	20.8	9:32:19	7622680.18	735295.01	1.4	
	DSP-2	19.7	9:43:05	7622988.23	735031.04	4.1	14.9
	DSP-2R1	20.6	9:43:09	7622988.23	735031.04	4.8	14.9
	DSP-3	19.4	9:44:32	7623003.05	734799.60	10.7	
	DSP-3R1	20.5	9:44:37	7622998.96	734805.80	8.5	
	DSP-4	20.8	9:46:03	7622886.00	735489.86	12.1	
	DSP-4R1	20.8	9:46:07	7622881.74	735489.98	8.7	
Remarks:				Action Taken:			
DSP-2 exceeded 10% over background, taken in the plume.				Re-test DSP-2R1 was taken.			
DSP-4 exceeded 10% over background, taken in the plume.				Re-test DSP-4R1 was taken.			
DSP-3 exceeded 10% over background, taken out of plume.				Re-test DSP-3R1 was taken.			
on starboard side.				The disposal ended and the dredge moved away from the area.			
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DSP-1	Background - 100' Up Current, Within 600-Foot of Channel					OR WA WA	OR, WA Not Required Not Required
DSP-2	100' Down Current						
DSP-3	150' Radially from point of dredge (Port or Starboard)						
DSP-4	900' Down Current from point of dredging						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

Dredge Sugar Island Project Name/Location:		Contract Number: W9127N-05-C-0012					
Columbia River Channel Improvement - RM 95+00-104+20.							
Date: 12/07/2005							
Dredging <u>Load Number</u> 1529 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Overflow through skimmers only <u>Weather:</u> Clear <u>Wind:</u> 0-5 kts <u>Seas:</u> 0-1' <u>Disposal location</u> Columbia River RM 101	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.5	13:46:14	7623316.86	753734.45	2.7	
	DR-2	15.9	13:47:33	7623151.92	754079.53	14.8	14.2
	DR-2R1	15.6	13:47:37	7623152.10	754085.61	13.2	14.2
	DR-4	18.4	13:49:02	7623328.81	754767.64	6.3	
	DR-4R1	19.6	13:49:05	7623328.98	754773.71	6.5	
	DR-3	19.7	13:50:46	7623271.57	753334.47	12.5	
	DR-3R1	19.6	13:50:48	7623275.82	753334.35	12.1	
Remarks:				Action Taken:			
DR-2 exceeded 10% over background, taken in the plume.				Re-test DR-2R1 was taken.			
DR-4 exceeded 10% over background, taken in the plume.				Re-test DR-4R1 was taken.			
DR-3 exceeded 10% over background, taken out of plume				Re-test DR-3R1 was taken.			
on port side.				The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.			
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel					OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current						
DR-3	300' Radially from point of dredge (Port or Starboard)						
DR-4	900' Down Current from point of dredging						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

Dredge Sugar Island Project Name/Location: Contract Number: W9127N-05-C-0012							
Columbia River Channel Improvement - RM 95+00-104+20.							
Date: 12/07/2005							
Dredging <u>Load Number</u> 1528 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Overflow through skimmers only <u>Weather:</u> Clear <u>Wind:</u> 0-5 kts <u>Seas:</u> 0-1' <u>Disposal location</u> Columbia River RM 101	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.4	10:32:27	7622791.21	753974.15	5.7	
	DR-2	17.3	10:34:37	7623038.39	754283.34	12.4	14.1
	DR-2R1	17.4	10:34:40	7623042.82	754289.30	12.0	14.1
	DR-3	19.5	10:37:38	7622607.01	753784.78	15.6	
	DR-3R1	19.3	10:37:42	7622602.92	753790.97	13.0	
	DR-4	20.2	10:35:55	7623149.58	754906.42	14.5	
	DR-4R1	20.4	10:35:59	7623149.75	754912.49	12.3	
Remarks:				Action Taken:			
DR-2 exceeded 10% over background, taken in the plume.				Re-test DR-2R1 was taken.			
DR-4 exceeded 10% over background, taken in the plume.				Re-test DR-4R1 was taken.			
DR-3 exceeded 10% over background, taken out of plume				Re-test DR-3R1 was taken.			
on port side.				The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.			
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel					OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current						
DR-3	300' Radially from point of dredge (Port or Starboard)						
DR-4	900' Down Current from point of dredging						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						

Dredge Sugar Island Project Name/Location: Contract Number: W9127N-05-C-0012							
Columbia River Channel Improvement - RM 95+00-104+20.							
Date: 12/07/2005							
Dredging <u>Load Number</u> 1530 <u>Tidal Stage</u> Ebb <u>Dredge State:</u> Overflow through skimmers only <u>Weather:</u> Clear <u>Wind:</u> 0-5 kts <u>Seas:</u> 0-1' <u>Disposal location</u> Columbia River RM 101	Sample Point	Depth (ft)	Time	X Coordinate	Y Coordinate	Turbidity (NTU)	DO (Mg/L)
	DR-1	20.3	15:36:23	7622557.04	752460.84	7.0	
	DR-2	18.4	15:37:36	7622543.29	753032.70	12.4	14.2
	DR-2R1	18.6	15:37:40	7622543.63	753044.85	12.0	14.3
	DR-4	21.5	15:39:04	7622790.18	753785.71	8.1	
	DR-4R1	21.5	15:39:07	7622790.35	753791.79	8.1	
	DR-3	20.0	15:40:47	7622840.32	752538.00	4.6	
Remarks:				Action Taken:			
DR-2 exceeded 10% over background, taken in the plume.				Re-test DR-2R1 was taken.			
DR-4 exceeded 10% over background, taken in the plume.				Re-test DR-4R1 was taken.			
DR-3 taken out of plume on port side.							
				The dredge moved away from the area while continuing dredging to avoid further increasing the turbidity at the location where the exceedence was measured. The dredge coordinates were marked on the GPS screen to insure no further dredging occurred at the location where the exceedence was measured.			
Sample Point Key	All Tests Conducted With YSI 6600					Turbidity Compliance	DO Compliance
DR-1	Background - 100' Up Current, Within 600-Foot of Channel					OR WA WA	OR, WA Not Required Not Required
DR-2	100' Down Current						
DR-3	300' Radially from point of dredge (Port or Starboard)						
DR-4	900' Down Current from point of dredging						
Rx	Indicates a Re-Test where (x) is the Re-Test number for that particular point						